Public Works Digest

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Hawaii installations share good ideas

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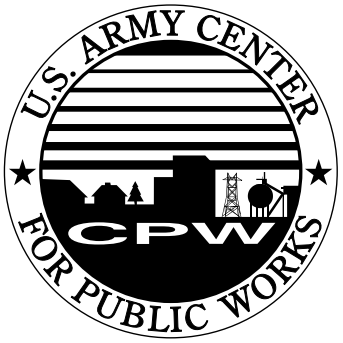

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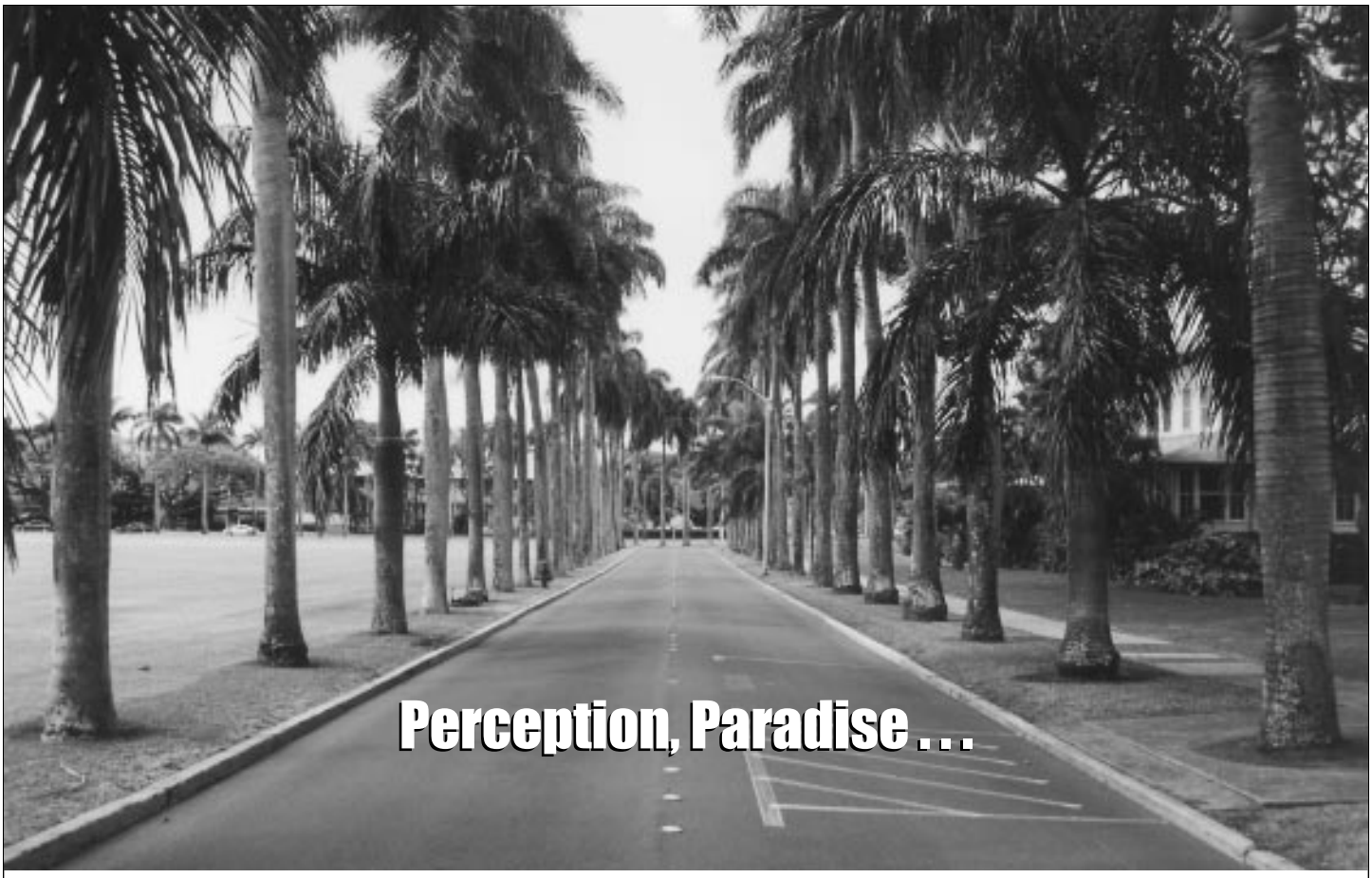

Perception, Paradise . . .

Palm Circle at Fort Shafter is home to the Army's Pacific Command.

Put a stand of Royal Palms in the picture, and you automatically envision a tropical paradise. Hawaii's Army installations do offer that famous, relaxed beauty that comes with vivid colors and fragrant blossoms...plus a few extra challenges beyond those DPWs face everywhere.

Visitors to Hawaii's installations soon realize that they are on the most remote island group in the world. Today's rapid communications and speedier travel help, yet isolation remains a factor. Materials and supplies are more expensive, and options are narrower. The unique culture and climate of the islands demand consideration and flexible response. Long distances and high travel costs make it harder to stay connected to the mainland for training, meetings, or simply to exchange ideas.

The DPW's special challenges—which they are meeting creatively—offer solutions to issues that DPWs face around the Army. Articles in this issue of ***Public Works Digest*** cover—

- A comprehensive environmental program that draws together expertise from several disciplines to ensure sustained training tempo, stewardship of scarce water, and protection for lands rich in heritage and endangered species.
- A major effort to record several decades' worth of documents and drawings in a CADD GIS system available to planners and DPW staff members.
- A Corps of Engineers' support system that keeps the installations sound and ready.

Like every DPW, the staff at Fort Shafter, Schofield Barracks, Wheeler Army Airfield, and Tripler Army Medical Center long for better funding and more people. They asked us to add two more items to the traditional DPW wish list.

Opportunities to get around the Army: Whether for training, exchange assignments, or brief details to stand in for a staff member at another installation, Hawaii's installation staff, especially in lodging and housing, would like chances to learn how mainland installations are managing their facilities and work load.

On-site training: Training is one of the most desired commodities in the U.S. Army Garrison, Hawaii. "We can afford to send only one of 20 employees TDY for training," explained Charlie Yang, Deputy DPW. "We need much more than that to stay current. Any provider who is willing to arrange to export a course to us, please call! We would love to talk to you!" PWD

Water, water everywhere...

...nor any drop to drink."

So reads the **Rhyme of the Ancient Mariner**. Hawaii's delicate island ecosystems lie in the heart of the vast Pacific Ocean, yet fresh water for drinking is a precious, sometimes scarce resource. DPW Hawaii has undertaken a variety of water saving measures that conserve water on Big Island (Hawaii) and also at installations on Oahu.

Community carwashes. Unit fund raisers, school boosting projects, Saturday morning clean freaks—all were contributing excess soapy water to storm drain discharges. Cliff Takenaka, Chief of the Compliance and Pollution Prevention Division said, "We were starting to get concerned about the level of stormwater runoff and the number of locations." What did the DPW do?

"We built two community washracks, adjacent to gas stations at Shafter and Schofield." The cost was about $30,000 to do the job through a JOC contract. Wastewater from the carwash area goes into an impoundment pond where it percolates safely through grass. The technique is simple, cost effective, and environmentally sound. The project included picnic tables and grills, so that fund raisers could also cook hotdogs and dispense sodas to waiting customers. "Community members love to use the sites. Customers find it convenient to gas up and wash up at the same time. They know they can usually expect to find car wash service at the installation gas stations. Unchecked runoff has gone way down. We see it as a great way to improve services on the installation and improve water management at the same time."

Recycling washrack for military vehicles. Pohakolua training area, located on the Big Island, Hawaii, has very little water. But training requires a lot of water—not just to quench the troops' thirst and let them shower after a hard stint in the field, but also for military equipment.

"We must make sure that equipment comes back to Oahu free of sea salt," Takenaka explained. "We also must wash it down before it moves onto the range at Pohakolua to minimize chances of weed and seed transfers between islands." The range is home to native Hawaiian plant species which have been largely ousted from other islands by competition from imported plants.

The twin goals of conserving water and minimizing contaminated discharges are being met with a recycling washrack that reuses water and filters out foreign material. "We used conservation funds to build the $225,000 facility," Takenaka said. "It uses cyclone filters and centrifuges to force foreign material out of the water." The equipment built into the washrack did not have to be custom-designed. It is commercially available.

Waterless urinals save thousands of gallons. "We tried to use gray water in standard toilets and urinals," reported Mike Tanaka of the Hawaii Garrison DPW. "That's recycled water from laundry and shower facilities. But it did not work—it caused a lot of equipment failures and repair, both to normal and low-flow fixtures." Now the command is completing a successful test of waterless urinals at Pohakolua training range, and planning to install more. These low-to-no-maintenance facilities will save money, time, people, and most of all—water.

Dip Ponds fight fires. Live fire training around arid vegetation is sure to start fires. In the past, helicopters fought blazes at Pohakolua Training Range by dipping water from the Ocean. This was effective in damping the fires; however, the salt water and the rolling ocean surface were potential hazards for the helicopters, and the salt water was damaging the training land. A few strategically placed dip ponds filled with fresh water have solved the problems. Helicopters make shorter, safer trips; the water doesn't hurt delicate mechanisms or ecosystems; and the fires are extinguished quickly.

Lower the flow. As part of its overall Energy Conservation Program, the Hawaii Garrison is installing low flow shower heads as part of any new renovations and new construction. Other water-saving devices have been installed whenever practical. Even the DPW's ➤

Hawaii's installations vary from the lush vegetation shown here to virtual "moonscapes" on arid training lands.

washrooms feature lavatory faucets with motion sensors, dispensing enough water for a hand wash before automatically shutting off.

Permit roll-up. Though it is not a direct water saver, Hawaii's DPW has saved administrative headaches and costs by working with the State of Hawaii to establish a single Storm Water Permit that covers Schofield, Shafter, Wheeler and Aliamanu. One monitoring requirement, one consolidated report, one permit cover all four installations and cut the red tape and other requirements.

POC is Cliff Takenaka, Chief, Compliance and Pollution Prevention, (808) 656-2878 DSN 315.

Ag-Bags for quicker composting

Schofield Barracks has found an effective way to compost grass and tree clippings and other groundskeeping waste. The "Ag-Bag" is a 30' x 6' plastic bag that can be stuffed with debris. A high-powered motorized blower aerates the debris and speeds the composting process. This means that the material in the Ag-Bag does not need to be turned, lowering operations costs. The bags are also an efficient space saver. Composting could potentially save the installations up to $130,000 a month in landfill tipping fees.

The goal is to turn the 2,200 tons of green waste Hawaii's installations generate each month into potentially saleable compost. Currently, the DPW is partnering with agricultural use to determine whether the compost could be used for helping the Island State's farmers to grow crops.

POC is Cliff Takenaka, Chief, Compliance and Pollution Prevention, (808) 656-2878 DSN 315.

Tie service orders to craftsperson

One way to improve service order accountability? Tie each service order to the craftsperson assigned to complete it. This enables the DPW to track orders better, and keeps work from falling through the cracks. "This concept has great potential for wider use in the Army," said CPW systems analyst Miriam Ray.

POC is Miriam Ray, CECPW-FM, (703) 428-6074 DSN 328.

Accountability pays off

Hawaii's DPW trains 40 soldiers a month to be the environmental compliance officers for their units—getting down to company level. The training is followed up with a rigorous inspection program. Inspectors go out with a uniform checklist for a multimedia inspection including stormwater compliance, safety, and environmental compliance. Each unit is graded, and must pass at the 85 percent level. Awards are given for significant progress and for 95 percent or better scores on the inspection. A trophy is awarded to the best unit. Units also self-inspect. How does it work? "You can sure see the improvement at the motor pools!" said Cliff Takenaka of the Compliance and Pollution Prevention Division. "We had RICRA citations in 1994, and we went from that to a top compliance rating."

POC is Cliff Takenaka, Chief, Compliance and Pollution Prevention, (808) 656-2878 DSN 315.

Good neighbors mend fences in Hawaii environmental arena

Hawaii's Ecosystem Management Program makes ecosystems much more than an environmental affair. "We've included all the players," said Cliff Takenaka of the Compliance and Pollution Prevention Division. From the Army, the division has included not only the Endangered Species Management and Cultural Resources Management people, but also folks in charge of Outdoor Recreation, Training, and Fire Protection and Prevention. All efforts are coordinated to ensure that every participant is working toward a common goal in a coordinated way.

The process has paid off most in meeting the public over endangered species issues, Takenaka said. "In Hawaii, endangered plants are the biggest issue. There's a lot of controversy and conflict. Fencing is our main means of protecting rare or endangered plants from a large and destructive population of feral pigs and goats. The people who hunt them also contribute to habitat destruction."

"Fencing is also the hottest issue," Takenaka explained. "Hunting groups would basically like us to put a fence around each patch of endangered plants and keep access open everywhere else. It's a big issue on the Island of Hawaii, where hunting is a major cultural issue. Many people there still have a subsistence attitude toward hunting—for them it's a proud way to put food on the table. It's a Native Rights issue. On the other hand, the Sierra Club and other environmental groups would prefer it if we would fence much larger areas. We are somewhere in between, with the hope that fencing about 2,500-acre swaths of land would achieve protection for our native plants."

These positions became clear in a series of five or six meetings the installation set up with local stakeholder groups and with organizations like the US Fish and Wildlife Service, The Sierra Club, neighboring landowners, and hunting groups. "We hired a facilitator/mediator to help us talk with one another," Takenaka said. "I can't say the results were dramatic, but they created a good basis for further work. Nobody's position changed, but better understanding came out of it. A big part of the process was that we got to know our neighbors. And where we started out as everybody's 'bad guys,' we emerged looking like the middle-of-the-road group."

An added benefit? The neighbors now have more trust in the Army. "For example, we have been doing a Cultural Inventory that identifies Native Hawaiian sites. We use a lot of leased land. The landowners have to make the decision to nominate the sites for the historic register themselves. We tell them whenever we have identified something significant, and of course we govern our own use of the leased land accordingly. It's up to them to do the rest."

Fire protection and prevention is another area of great concern to neighboring landowners. "Habitat burns and property damage are something none of

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us want," Takenaka said. "Now that we are in better communication, our neighbors understand that we are going the extra mile to protect our property and theirs."

Our Outdoor Recreation people have done a great job making it easier to access hunting areas. They have made the maps and the regulations that direct people to hunting, fishing and hiking areas that are good to use, while limiting or closing access to sensitive sites or impact areas."

As a result of these successful programs to inform and cooperate with the public, the installations have planned to schedule once-a-year meetings with neighbors to assess the status of environmental efforts and look at future directions. "We plan to continue to work on issues like animal and weed control, communications and education," Takenaka said.

POC is Cliff Takenaka, Chief, Compliance and Pollution Prevention, (808) 656-2878 DSN 315.

Soldiers are proud to work in the offices they renovated themselves.

DPW staff rewired the building and installed new, energy-efficient lighting.

Hawaii as-builts get pixillated

Using two approaches, Hawaii DPW is putting decades worth of facilities maps into digitized formats. Ultimately, installation staff should be able to take a map section to the worksite and be able to read "down to the pixil" where utilities systems and other key infrastructure features are located.

Under a contract let for the installations by Huntsville, the Hawaii DPW is acquiring a complete utilities system map update. The contractor is validating maps, correcting as-builts to current status, and putting the data on CADD/GIS in digitized format.

The process has included extensive improvement to a database confused over the years by changing organizational designators and numbering systems. The contractor has also created a grid system which converts large map sheets to smaller grid sections for use by DPW workers on site. The grid sections are keyed back to the CADD system.

Brian Kamisato, Systems Chief for the Hawaii DPW, has taken a further step to put a vast collection of maps on line. His Engineer Document Management System will eventually replace a time-consuming part of the design process—research.

"The process now takes two or three days at best. There's no sorting or ordering procedure that works for all our maps. The designer simply has to do a line-by-line review of binders that catalogue 80,000 drawings. Then he or she must go to the drawers and hope that the drawing is in the right place, or that the numbering scheme still works! Everything you look for is a needle in the haystack."

Kamisato has worked with the DOC to acquire software that scans and loads map sheets into the Engineer Document Management System (EDMS). "We chose 'Teammate for Windows' by Bentley. The system is CADD Microstation compatible, which is the standard package for Hawaii, used by both us and the Corps of Engineers." Concurrently, the installation bought a new server and computers for the Engineering, Estimating, and Utilities shops so that they can tap EDMS.

How does it work? You log on and use simple search criteria to locate your building—for example, "Wheeler" takes you to all Wheeler Air Station facilities, "Building 300" puts you at the map, "electrical" zeroes in on the infra-

structure system you need. You can also go into the drawings and zoom down for a close look, and copy the drawing to workspace use as a basis for design.

"Better still, the District and Division can tap directly into our EDMS for design services."

The paybacks of the system come in a stabilized archive that is far easier to keep up. Overtime eaten up in research and losses of data are stopping. Design costs are lower too, since bids are higher when the research information is not complete.

"Even our Provost Marshall and MPs are happy with this system," Kamisato said. "They appreciate having floor plans for emergency access planning and anti-terrorist protection."

"It's almost like a GIS for the whole Hawaii DPW system," Kamisotos said." You can use it to get overlays like a GIS. You can also check the as-built first, and get a 'today' snapshot of the facility. We can also move this data into GIS and Microstation Geographics. We have committed to creating site maps for all our 28 sites—far more than you first think we have when you're here for a brief visit. This will probably replace more than that number of different map sets and numbering systems. Our old process was plain broken. This creates a better way!"

POC is Brian Kamisoto, Systems Engineer Branch, (808) 656-0302 DSN 315.

Soldiers, DPW join hands to renovate motor pool

"The good news? You're getting new barracks. The bad news? We're moving you to **that** motor pool over there." B Company of the 225th Forward Support Battalion, a unit with an OK motor pool, was suddenly plunged into a facility that looked like something out of Tales from the Crypt. "Doors, what doors they had, were sawed in half. Some of them could only be locked by securing them with a padlock and chain through a hole punched in the corrugated metal wall," said Dave Pawlak of the Schofield Barracks Engineering Division. And that same corrugated metal served as the only wall inside and out. "The latrines were old, dirty and dilapidated. There was no window security, cages, adequate lights or locks. They had no office space."

Looking at the motor pool today, it was hard to believe that such a good-looking facility had been reborn from the conditions Pawlak described. "We could not have taken the time or labor to do the whole job for them," he explained. "We did the rewiring, painted the exterior, striped the parking lots, repaired the plumbing, and installed energy-saving light fixtures, secure doors, window guard screening, locks, cages and bay doors. The troops did the rest through Self Help."

The soldiers built a shelter to enclose their air conditioning compressor.

"The rest" included interior walls and wall coverings, drop ceilings, carpentry, paint, floor coverings. "SSG Muniz spearheaded this operation," Pawlak said. "Leadership in the unit by someone who has his kind of enthusiasm and desire to do the job right down to the finishing touches makes all the difference."

The unit's willingness to go for excellence showed even on the exterior of the building, where the unit has built a shelter for the air compressor and fabricated the "flaming cannonball" insignia of the unit.

POC is Dave Pawlak, Schofield Barracks, Support Division, (808) 438-0377.

As a finishing touch, soldiers from this ordnance unit fabricated a "flaming cannonball" to sign their handiwork.

SAVs—we make a difference

What happens after a CPW Staff Assistance Visit team climbs on the airplane and heads for home? 1997 Hawaii team member Malcolm McLeod also served on a 1995 team. He was happy to see a lot of changes on his return to Hawaii. "I don't know if we really caused the changes—but I sure hope our suggestions supported some of the great things I see this time!"

Since the last CPW visit, McLeod reported, the Hawaii DPW has carried out the following actions supported by the CPW team—

- Upgraded the water treatment plant, and installed a trailer at the plant area so that plant workers have a pleasant, sheltered place for lunch, meetings and breaks.
- Created a full-time Energy Conservation Officer staff position. More than that, Scott Bly, who does the job, has just won the Army's top Energy Award!

What's happening this time around?

- Earl Jamison, a systems contractor from E.L. Hamm, trained the Hawaii DPW staff on Job Cost Accounting.
- O.W. Evans, a CPW planning expert, is assisting the installations with a space utilization survey—including some room-by-room analysis, to expedite the installation's infrastructure reduction program.
- Miriam Ray alerted the installation that some Army-purchased software licensing agreements will let them use programs without buying them. This saved the installation from an unnecessary $17,000 purchase on the spot.
- The installations are looking for improved key control. The team shared Fort Sill's recent successes with keyless entry systems.
- CPW identified several types of training and technical support that could help the DPW continue to upgrade operations from water treatment and storage, cross connection controls, corrosion control, and recycling.

Charlie Yang, Hawaii's Deputy DPW, serenades the CPW SAV team. "We would be glad to have you visit every two years!" he said. And ***Aloha****!*

The Center for Public Works centrally funds the Staff Assistance Visit program. Visits are scheduled upon the request of the installation. For more information about the program, contact Milt Elder at (703) 428-7969 DSN 328.

Pacific installations, Corps build partnerships

"The Corps of Engineers" might be a very good answer to the old question—if I had to pick a "desert island" partner, who would it be? Partners with DPW Hawaii in everything from major construction to hospital maintenance, the Corps serves a host of needs for the Pacific installations.

The partnership is a close one. "Our customers are linked to our LAN," said Raleigh Sakado, Engineering Division. Every Tuesday's staff meeting includes people from Honolulu District, Pacific Ocean Division, the DCSENG of the Hawaii Garrison and the DPW. Issues aren't allowed to linger. We solve them or elevate them quickly!" Toward the end of the fiscal year, the District and Division work intensively with the DPW to ensure project orders are ready to go if year-end funding becomes available.

The collocation of Corps offices on Hawaii's Army installations further strengthens the ties between the Corps and Army community. "Our Schofield Resident Office and the DPW's Engineer Plans and Services Office share space on Schofield Barracks," Sakado said. "The USARPAC Deputy Chief of Staff for Engineering is right across the street. Some of our people live in the same housing areas."

Formal structures also tie the two entities closely. "Our Program and Project Manager interface works well," Sakado said. "We really do have a single point of contact with the DPW for major projects." Technological links help too. The GIS/CADD database can be used corporately by both installation and district/division design staffs.

At Tripler Army Medical Center, the Corps has made a practice of rotating staff members into a position along with the other shop technical managers. "They learn what the job is truly like, how the customer thinks, what the special conditions are in the facility. Their service is much better because they have been there," Sakado said.

"For example, they were planning to move 12 operating rooms. We would have suggested doing the move in two groups of six. The people who had been working at the hospital knew that this wouldn't work, and recommended we move two at a time until the job was completed." That kind of inside knowledge avoids disruptions that can cause customers to feel badly served.

In another case, some leaks that might have cost many thousands to fix were repaired with a $2,000 application of epoxy grout due to engineer staff familiarity with the building.

"We involve customers," Sakado said. "We meet with Installation Commanders quarterly. We also get down into the organization one-on-one. The

District Commander goes out with the housing chief to look at installation projects regularly. We involve residents and facility users in Requests for Proposal meetings. That's how you find out "this is the way the kids walk to school, it's not a good idea to turn it into a contractor staging area during construction!"

Coordination also involves the public and groups who have a special interest. When the Corps built a new tower for the Hale Koa hotel and created extensive new landscaping, they knew that native burial sites might be uncovered during construction. "We anticipated the possibility that we might disturb human remains. We consulted with interested parties before we began so that we had a methodology ready before we began construction." The public could look on without anxiety as the Corps broke ground on the project, and work could proceed in an orderly fashion respectful of local traditions. The project added 400 new hotel rooms and created a public park in the Waikiki area in plenty of time for observances of the Pearl Harbor 50th anniversary.

A smaller project with almost equally high visibility was a renovation of the Fort Shafter Distinguished Visitor Quarters also completed in time for the 50th Anniversary observances. "The Corps did the renovations, furnishing and interior design," Sakado said. "We held minipartnering sessions weekly, and successfully handled several modifications. This was a real team effort!"

"Our major Army Family Housing projects have moved equally quickly. We kept to budget and finished on or ahead of schedule. Families are really happy with the new quarters."

As for the future, the Division is looking around the Corps and seeing good ideas they want to implement for their customers in the Pacific area. "A time and materials contract and a contract similar to the MEDCOM toolbox contract designed by Huntsville are in the works. We are fully involved in JOC. We have a JOC set up for our own use so that we can be more responsive to our customers. We are looking into privatization support to see what will be expected of us to do for our installations as they move forward," Sakado said.

"In the near future, we expect dollar limits for delivery orders on indefinite delivery order contracts to be raised. Finally we will have this tool, and it can help us be flexible in serving customers. We are glad this worked out!"

The only thing Sakado wishes for is that "impossible dream": multi- or no-year OMA funding to support installation needs. "For now, we will keep doing our best to serve installations within fiscal year constraints. We have a service attitude!"

POC is Raleigh Sakado, (808) 438-6922. PWD

(Photos by Penelope Schmitt.)

Military housing takes a turn for the better

by Linda Greene

The new Fort Meade townhomes, designed and constructed by the U.S. Army Corps of Engineers, provide a living environment designed to enhance the occupant's quality of life. (Photo by Suzanne Bledsoe, USACE Baltimore District)

The old adage, "If the Army wanted you to have a family, they would have issued you one," is no longer valid. Today's modern, all volunteer Army comes with families that have all the needs and demands of their civilian counterparts—not the least of which is adequate housing.

On a recent visit to the Baltimore District, Chief of Engineers LTG Gen. Joe N. Ballard had an opportunity to see for himself a prime example of the Department of Defense commitment to military families and their quality of life. Ballard toured the Fort Meade, Maryland, Family Housing Project, which was completed by Baltimore District in November 1996 and currently enjoys a 99 percent occupancy rate.

"From the very beginning, we wanted this to be the finest enlisted housing possible," said MAJ J.T. Hand, deputy district engineer for civil works and the project's former project engineer. "Everyone recognized the need for military housing to be more than just shelter, so we set a goal to design and build a family-orientated community rather than military housing," Hand added.

The kitchen was designed with ample counter and cabinet space, making the area both livable and functional. (Photo by Suzanne Bledsoe, USACE Baltimore District)

"As a result, the firm of CHK Architects designed the two housing areas in the form of court-cluster townhouse neighborhoods that promote a sense of family and community."

According to Hand, once a concept was designed, the Corps worked hard at developing a true partnership among the Assistant Chief of Staff for Installation Management, the Fort Meade Director of Public Works, the Corps and most importantly, military family members. "Customer participation in the design process was vital to the project's success. This partnership resulted in a low maintenance product that met the needs of the Fort Meade community and the soldiers, sailors, marines, and airmen it serves," said Hand.

Hand pointed out that an important feature in producing the final product was to build models of the proposed townhouses prior to actual project construction. Once built, the models were opened for inspection and the military community invited to visit and to offer suggestions that would enhance the original design.

As a result the units have features not often found in traditional military housing like garages, central air, conditioning, and screened porches off a family

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room. Also, the color schemes are individualized for each townhouse cluster, further providing the feel of community identification and sense of ownership. The design also went to great lengths to save existing trees, using them as buffers near roads, while new plantings were used to create privacy within neighborhoods and to reduce noise.

The housing areas also minimize roads, maximize open green spaces and enhance safety, along with integrating recreational facilities that act as focal points for bringing neighbors together. Integrated into the two housing areas are eight tot lots, five basketball courts, two regulation softball fields, three regulation tennis courts, one football/soccer field and a lighted, one-mile fitness trail.

"Children never have to cross a street to get to a tot lot", said Hand. "There are bicycle trails providing safe access to all recreational areas, making it easy for the children and families to enjoy themselves."

Originally, the $24 million project, which began in 1994, called for the construction of 251 new townhouses in two housing areas. The townhouses at the two locations have two, three, or four bedrooms with end units designed to accommodate military families with handicap needs. The scope of work also included the renovation of 24 existing duplexes, at an additional cost of $720,000. However, according to Hand, a closer look at the renovation work and what it would accomplish quickly identified that the money would be better spent building new units.

"The Fort Meade Director for Public Works, in coordination with other project partners, agreed that for $280,000 more, 11 additional townhouses could be built, better serving the needs of military families," said Hand. "Most young enlisted housing requirements at Fort Meade are for three or four bedrooms units. While the renovated quarters would have only 800 square feet and two bedrooms. All agreed we made the better choice."

According to Hand, $25 million was the final cost for the entire project, which the contractor, Harkins Builders, Inc., completed 11 months ahead of schedule.

One of the first families to occupy one of the new townhomes was Staff Sgt. Gregory Jenkins, his wife Jayne and their two children. Both Jenkins and his wife have engineering backgrounds, so their appraisal of the new quarters was done with a more critical eye than most.

"Having a lot of experience with computer-aided design programs, it was apparent to me," said Jayne Jenkins, "that the architect who designed the townhome understood the effective use of space and people's comfort needs. Families are bigger and busier, and design features like 'his' and 'her' closets, fenced in backyards and a garage are important to families, both civilian and military. However, when dealing with military families, comfort often equates to enhanced morale. After all, when you're asked to pick up and move every three years, it's nice to know that someone is trying to make that burden a little lighter."

The Jenkins are seasoned veterans of military housing and able to make comparisons since they've lived in Air Force military quarters both overseas and in the states.

"The Fort Meade Army quarters are the best we've lived in," said Jayne Jenkins. "With approximately 1,300 square feet of living space that includes three bedrooms and two and a half baths, this military housing does more than put a roof over our heads. It gives us a comfortable home, adding to the quality of our lives."

POC is Linda Greene, (410) 962-4617. PWD

Linda Greene works in the Public Affairs Office of the U.S. Army Corps of Engineers' Baltimore District.

New hotel fits the bill for 80th ASG

by Clayton Turner

The "new" hotel, Hotel Maisieres, located almost directly in front of the SHAPE main entrance.

There were no two ways about it. The Hotel Raymond, long the 80th ASG's transient billeting facility, no longer satisfied the needs of our community in Belgium, and we would have to replace it.

The existing facility, called the Hotel Raymond, had been constructed in 1969 and leased by the U.S. Army since 1979. It has only 67 two-person rooms, no patron or guest parking, and is located across the street from the main train station for the city of Mons in what has become a high crime area.

According to a U.S. Army Corps of Engineers, Europe District, project validation assessment study done in December 1994, the 80th ASG had a requirement for 92 two-person rooms and 92 POV parking spaces. We also

➤

The "old" hotel—Hotel Raymond, located in the city of Mons, Belgium, almost directly across from the main train station. With no hotel parking, the only parking was on side streets.

needed an additional 25 parking spaces for guests, employees, and service vehicles.

In December 1995, the BENELUX Real Estate Office issued a request for proposal to meet the need. By the February 1996 cut off date, we received four proposals. An economic analysis ruled out new construction but pointed to the Maisieres Hotel as the option least expensive to the U.S. government. Its net present value of $9,643,824 was almost $2.5 million less than the next lowest cost option! Furthermore, the equivalent uniform annual cost showed that the Maisieres option ranged from $200,000 to $300,000 less **per year** than the other options.

We forwarded the economic analysis to USAREUR in May 1996, supported by letters from USAREUR DCSRM and USAREUR DSCPER. Actual contracting authority to lease the Hotel Maisieres was granted to the BENELUX Real Estate Office in early March 1997.

We began moving on 1 July and should be finished by the end of August 1997. We have planned our moves to coincide with some minor construction work, including the installation of an air conditioner for the computer room, connecting room doors, an AFN antenna, and additional electrical outlets. At all times during the move, there will be at least 67 rooms available for guests. By the middle of September, DCA expects to have the restaurant contracted and in operation.

The Hotel Maisieres has meeting rooms, adequate off street parking, and a room large enough for a small shoppette/gift store. The facility resembles modern American hotels in design and amenities. In addition to its economic advantage and increased number of guest rooms, the Hotel Maisieres has an ideal location, directly across the street from SHAPE Headquarters and within walking distance to most of the community support facilities (maintenance shops, real estate offices, finance, bank, post office, schools, recreation areas/gym facilities, and the in and out processing center).

POC is Clayton Turner, DSN 361-5424. PWD

Clayton Turner works in the EPS Division of the 80th ASG-DPW in Chievres, Belgium.

The lobby area of the Hotel Maisieres.

Submit your articles and photographs to the *Public Works Digest*

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"Strategies working!" say VTC participants

by Penelope Schmitt

The Corps' new actions to serve the Army are taking hold and starting to work, according to participants in the Chief of Engineers' second Videoteleconference, held on 18 July 1997.

LTG Joe N. Ballard, Chief of Engineers, welcomed the DPWs to the on-screen meeting with news that even more support is on the way. Reviewing the past year's actions, he reiterated his commitment to stay in touch with DPWs both to hear their problems and to share solutions they've discovered.

"I've made it a point to visit many installations lately, including Fort Hood, Fort Campbell, Fort Sill. I hear about what a great job you are doing from your Garrison Commanders and Installation Commanders, soldiers and civilians. I also see our partnering efforts are starting to pay great dividends."

On the horizon is accomplishment of the next phase of the Chief's strategy to provide more support to installations. "We are going to forward-deploy OMA spaces at key installations. FORSCOM has already given us their prioritized list of the places where they want us to put people. We have funded 25 spaces beginning next fiscal year."

The jobs will be attached to Corps Divisions, but the people will work for DPWs. Their job will be to facilitate design, work on 1391s, and to do the ground work for projects on a direct-funded, rather than a reimbursable, basis. This step answers one of the longest-standing requests of the installations—for help that costs less.

Word came in from all over the Army that collocating Corps support with the installations, another key initiative announced by the Chief last year, is becoming a reality. What's more, it is making a difference. DPWs at Forts Benning, Eustis, and Sill reported that their Area/Resident Offices have moved in with them, or are in the process of doing so. Fort Monroe cheered them on. "We know it works great—we have been doing it this way for several years now!"

Also working effectively, the Advocacy Program gives each Major Command a point person at Headquarters, USACE, to keep projects and programs on track and to resolve problems that need attention at the top.

This Videoteleconference focused on DPWs from TRADOC installations, who shared concerns and successes with the Chief for close to two hours. MG Dave Whaley, five days into his tour as the Army's Chief of Staff for Installation Management (ACSIM), joined in the discussion. These are a few highlights of the lively exchange:

Privatization: Carlisle Barracks expressed concern about an across-the-board directive to divest gas systems. Ed Watling, of the Army Center for Public Works, reviewed the Armywide problems of failed or failing systems, safety hazards and inadequate funding to address the problem. He agreed that installations would indeed face a higher must-pay bill for utilities, but emphasized that this policy came about because dollars earmarked for Army-owned utilities were often raided for other needs. "It's money we should have been spending all along!"

MG Whaley agreed that overall, the Army needs to get out of the natural gas business, but also promised to take a second look at installations which strongly believed the economics went against such a decision.

Housing Privatization, through the Commercial Ventures Initiative (CVI), also raised questions with installations. Fort Sill's DPW, COL Paul Nelson, believes that his housing office could manage housing stock successfully under BOP, the Business Occupancy Program. Fort Eustis also regrets the withdrawal of funding from the BOP program to support CVI.

MG Whaley responded that family housing across the Army simply can't be fixed through BOP. There is just not enough money allocated in the Program Objective Memorandum (POM).

Thus, in the privatization arena, it appears that scarcity of funds is forcing the Army to take an approach that will disappoint some installations which are having local successes with the status quo, in order to take care of a greater number of installations where current systems and infrastructure can't be properly maintained. The overall solution to many infrastructure problems will be privatization and outsourcing.

Commercial Activities (A76) Studies: Along the same lines, many participants asked for help in facing a renewed requirement to move forward with A76 studies. LTG Ballard said "The Corps is not involved as a primary player." However, he pointed out that Corps assistance might be able to help DPWs put together a successful Most Effective Organization (MEO) by tapping the Corps for some types of support.

"I'm not anxious to jump in as a commercial competitor. I want us to work as an Army unit to support your MEO, to work through partnering to achieve your MEO," Ballard emphasized.

MG Whaley reassured concerned installations that A76 did not inevitably mean a contracted operation. Fifty percent of organizations stay in-house after an A76 study, he said. The chances of avoiding the process are slim, Whaley pointed out, because the idea is driven by Congress, DoD and the Army's Senior Leaders. "Bottom line, no choice, must execute!" The good news is that ACSIM offers several centrally-funded contracts to help organizations do A76 without sidelining their own staff to conduct the study.

COL Richardson of the Army Materiel Command told the DPWs that under the Construct Functional Area Assessment, five installations are now partnering with their Corps Districts to look for ways to work together. They hope this will offer DPWs another tool for leverage and influence in the A76 situation. The installations will be partnering with the Corps in a two-year test to see whether they can share management responsibilities and create efficiencies.

Real Estate: Fort Benning and other installations were worried ➤

that they might not be able to execute their Real Estate funds effectively now that Corps Real Estate staffs had been cut. Liz Fagot of the Corps Real Estate office acknowledged the problem. "We became a partly reimbursable service in 1993," she explained. "We are looking for more up-front money for real estate services, because we realize the staff may not be there to handle your needs." LTG Ballard took on this issue as an item of concern he planned to address.

Warranty: Fort Huachuca resurfaced a request voiced by several DPWs at last winter's Worldwide DPW Workshop. "Our engineer team tries to get an error-free project. The Area Office does their damnedest. Still, the installation gets stuck with the dollars to clean up problems! Are you going to change that?"

LTG Ballard responded "You're talking about a warranty program. We are going to need some help from Congress on this. Users do not want to pay for construction mistakes. I'm sensitive. I had to live with that! Concurrently, we need to do a better job up front. I'm convinced we need a warranty program to cover human error that happens every time you pound nails and saw wood."

Area Office Contracting Authority: Pleased with their Area Office support, one installation said the big item on their 'wish list' was higher dollar authority for the office, so they could work more projects directly through the Area Office. James Jones, Deputy Director of Corps Military Programs Construction Division, agreed. "We see the need for more authority at the AO. We are looking at that and working it with PARC and SARDA."

Engineer and Scientist Career Program (CP 18): More than one installation asked for better opportunities for their CP 18 careerists to move into Corps slots for developmental details. LTG Ballard responded "I'm not satisfied that we have done a good enough job working CP 18 with your Major Commands. We need some relationship to bring the program into sync. Hope we'll start to get that synergy through collocation, rather than operating as two parallel worlds with a barrier in between. We need to treat you like part of the family."

Fort Drum's DPW said, "We've heard how Corps people can come to us, but how can people flow in the other direction? It's hard to let your one-deep expert go!"

Mr. Armstrong replied, "There's no intent to degrade your ability to do the job!!" The Chief agreed, saying that in any exchange of details, he'd expect both parties to be well qualified to take on the job. He reminded the DPWs that he is the Career Program Manager for CP 18, and wants them to come to him with concerns. "I'm your man! Anyone who owns CP-18, folks, bring your concerns to me!"

Contract assistance: Several DPWs praised the effectiveness of Corps contract instruments they were using to help them get the job done. Fort Benning's DPW said, "We love Huntsville's IDIQ contracts. Here's how good it is. Last Tuesday we got a mission to build ammunition igloos. That job will be on the street for bid by 1 August."

Fort McClellan agrees that "IDIQ is a winner!" Monterey loves their District's JOC contract support. Jim Kelley, of the Corps Reinvention Center for District Support, reminded the DPWs of other good instruments and ideas, like the Time and Materials Contract, Total Housing Maintenance Contract, and O&M Remediation Contract that the Center has picked up from other Districts to share with more Army installations.

COL Dunn, of TRADOC, asked for Corps help in executing $53 million worth of facilities reduction funding next fiscal year. "Installations need help to get the most out of that money..." best contracts possible to remove construction debris, asbestos, and so forth.

"We have got cost-effective instruments in place at our Districts," LTG Ballard said. "In the past we were not anxious to take on smaller contracts. Now it's a different ball game! We'll jump at everything!"

COL Dunn agreed that the Corps is becoming more responsive. "Your effort to make the Corps relevant is certainly noticeable," he said.

The Chief emphasized, "The intent of the Corps is to help DPWs do their jobs better. We are all in this thing together. We can all do better—we also owe it to take care of our work force. Equally important is the guidance from the ACSIM. He is the spokesperson for DPWs on the Army Staff."

MG Whaley added, "Send your cards and letters to whomever you want to take the action—but info copy the other. We are both here to support you, soldiers and families."

The Chief concluded by again reminding the participants of the Corps' determination to be relevant to the Army. "Be unified as a regiment! We all serve in the shadow of the Castle. We'll continue to partner with you. I'll visit! I'll answer the mail!"

The next VTC will be held in October and will aim to set the stage for discussions at the December DPW workshop. PWD

Penelope Schmitt is the Chief of the DPW Liaison Office at CPW.

Technical manuals available on home page

CPW's Electrical Division's is now offering its four Technical Manuals on the USACE home page. They are:

- **TM 5-682:** Facilities Engineering, Electrical Facilities Safety
- **TM 5-683/NAVFAC MO-116/AFJMAN 32-1083:** Facilities Engineering, Internal Electrical Facilities
- **TM 5-684/NAVFAC MO-200/AFJMAN 32-1082:** Facilities Engineering, Exterior Electrical Facilities
- **TM 5-685/NAVFAC MO-912:** Operation, Maintenance and Repair of Auxiliary Generators

The web address is http://www.hq.usace.army.mil. Look under "P" for publications. You will have to download Adobe Acrobat, which is on the same web page, in order to view these documents in detail. Hard copies are also available from the U.S. Army Government Printing Office, North Capitol & H Streets, NW, Washington, DC 20401.

CPW POC is Peter Cascio (703) 806-5169 DSN 656, FAX: (703) 806-5020. PWD

"End-of-year" contract abuse can be avoided

by Michael J. Organek

No one likes the year-end-stampede to contracting. But most of us fall into the trap.

DPWs usually submit current fiscal year funds with purchase requests and commitments for requirements-type contracts during the 4th Quarter of the fiscal year. This is because fluctuation and re-prioritization of the maintenance and repair workload during the fiscal year make funding available at the **end** of the fiscal year.

The result is that delivery order requests against requirements type contracts are rushed to the DOC during the last hours of the fiscal year with poorly defined specifications, unrealistic contractor delivery dates for performance and quantities which exceed the federal acquisition clause on delivery order limitation. Many contractors refuse to accept delivery orders which exceed the maximum amounts.

To avoid year-end funds being turned back to the DPW, the DOC then has to negotiate costly modifications to accomplish the work called for on the delivery orders.

Many of these problems can be avoided. Both the DOC and the DPW have management tools for projecting and scheduling their respective organization's FY workload. These include the Advance Acquisition Plan (AAP) and the Annual Work Plan (AWP).

Too often, however, these documents are formulated before or at the beginning of the fiscal year and then shelved for the remainder of the year. Adhering to the projected submission dates to the DOC for Acquisition Requirements Packages would mitigate the end of the fiscal year workload.

Once you establish a realistic fiscal year workload together with your DOC, you can accomplish end-of-year requirements in a timely and appropriate fashion by:

- Taking delivery order quantities and work completion dates into consideration and avoiding costly damages.
- Making sure your maintenance and repair requirements are valid.
- Taking procurement acquisition lead time into consideration and minimizing modifications to your delivery orders.
- Monitoring and questioning **all** additional costs above the original government cost estimate.
- Not using remaining fiscal year funds for "gold-plating" or nice-to-have projects.

POC is Michael J. Organek, CECPW-EP, (703) 806-6020 DSN 656.

PWD

Michael J. Organek is a procurement analyst in CPW's Engineering Directorate.

Window cord strangulation can be prevented

The fatality rate from window cords puts them among the greatest strangulation threats to children three years old or younger. Between 1981 and 1995, 194 fatal window cord strangulations were reported. Ninety-three percent of victims were 3 years of age or younger.

Pull cords or venetian-type horizontal window covering accounted for eighty-six percent of documented injuries. Strangulation deaths from window cords happen most when children are in places their parents think are safe: in cribs or in their bedrooms. The deaths are silent—the child can't call out for help. In 85 percent of the documented cases, parents were at home at the time of the incident.

There are two common ways children strangle in these cords. Infants in cribs near windows get tangled in the looped cords while sleeping or playing; and toddlers trying to look out a window, climb on furniture, lose their footing, and get caught in the window cords.

On January 1, 1995, at the urging of the Consumer Product Safety Commission (CPSC), domestic manufacturers and importers began production and importation of two-corded miniblinds with individual tassels on each cord with a single break-apart tassel. But old inventory is still on store shelves.

In January 1997, a voluntary standard requiring the elimination of all loops on miniblind cords and placement of nondetachable cord tension devices on continuous-loop cords was published. Eliminating the loop in window covering pull cords is an important preventive measure. However, long blind pull cords still pose an entanglement hazard.

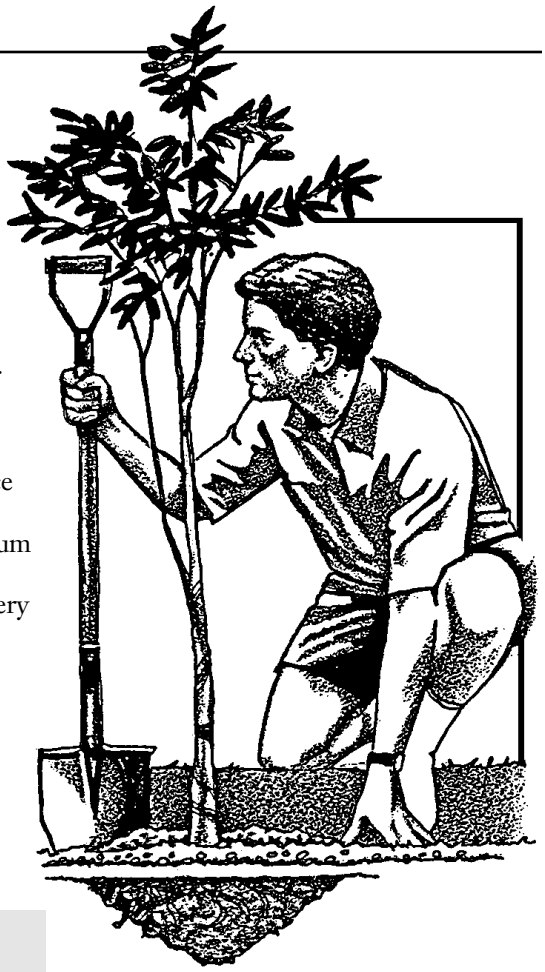
Many military quarters have the older type window covering cords. Some of these quarters have cramped bedrooms, and often heating units or air conditions make placement of cribs or beds away from windows difficult. Parents with infants are advised to move cribs or beds away from windows with draperies. Any household furniture providing height near a window should be moved once a toddler is able to stand while holding onto furniture. Window cords should always be kept out of reach of children.

Window cord strangulation is a hidden hazard that all parents should eliminate immediately by cutting the loops of the window cords, putting on safety tassels, and moving furniture away from the cords. These simple precautions can prevent a parent's worst nightmare.

Parents can get safety tassels and tie downs by calling the Window Covering Safety Council toll free at 1-800-506-4636. For safety information on window cords, call the please CPSC Hotline at 1-800-638-2772.

PWD

Nursery voucher participation "grows" at Picatinny Arsenal



In the past, the U.S. Army Armament, Research, Development and Engineering Center, Picatinny Arsenal, New Jersey, had an agronomist who spent thousands of dollars on plants each year for grounds beautification. These plants were placed in a central area where building managers and housing residents could come and choose whatever they wanted. The plants often died because their arrival did not coincide with a convenient planting time for the new owners. Any leftover plants eventually died from neglect too. Since they were all "free," it was no big deal.

In the spring of 1995, the post Housing Office began a new yard beautification program, one that could save money and result in less waste. The housing chief entered into an agreement with a local nursery, creating an instant success.

Here's how the Nursery Voucher Program works:

- Residents bring their plans and a cost estimate to the housing office where they receive a numbered voucher for that amount (maximum $50).
- Voucher is presented to the nursery along with valid ID.
- Nursery retains the voucher and the sales receipt while the resident takes his purchases home to plant.
- Every two weeks, a housing office representative picks up the vouchers and receipts and pays the amount due using the government I.M.P.A.C. credit card.

Today residents who have the time and really want to participate can bring their rough sketches to the nursery and receive expert advice on their individual yards. The nursery also offers a 10 percent discount on any item not on sale. Planting is accomplished at the convenience of the resident, money is spent only on plants for which there is a commitment to plant (no neglected plants), and little supervision is required (no one had to "handout" plants).

In FY 95 and FY 96, this innovative program helped Picatinny Arsenal win three prestigious awards — Army Community of Excellence (ACOE), Presidential Award for Quality (PAQ), and Research and Development (R&D) Center of the Year. Now in its third year, the Nursery Voucher Program continues to be a model of the good things that can be accomplished in cooperation with local businesses.

POC is Gary Gelmore, (973) 724-2190 DSN 880, e-mail: gelmore@pica.army.mil PWD

IFS electronic transfer of STARFIARS file to MegaCenter

by Chip D. Reid

Attention, all DPW sites planning to move the IFS-M system from UNISYS 5000 or 6000 platforms to a Server operating with SOLARIS! This information is for you!

Several sites that have already made the switch have experienced problems with the electronic transfer of the star.out file from IFS-M (SOLARIS version) to STARFIARS through the local Directorate of Information Management (DOIM) and the various MegaCenters (i.e., Chamberburg). Local DOIMs at these sites have been unable to process the FTP file transfers. Operating under the Server/SOLARIS environment, a 9-track tape capability is no longer available and electronic transfer of interface files become the norm. This change can be addressed by establishing a direct transfer of the star.out file from IFS-M to the MegaCenter using full-time permanent employees.

Prior to implementing IFS-M in the SOLARIS environment, the DPW must coordinate the requirement for a login and password at the supporting MegaCenter. The local DOIM applies for the login id and password for the DPW, and it usually takes 7-14 days for them to get assigned and activated.

The Customer Support office at Fort Lee, (804) 734-1051 DSN 687, can provide instructions for sending the file once the account is established. The STANFINS file can also be sent directly.

POC is Chip D. Reid, (804) 862-3000, e-mail: chip.d.reid@cpw01.usace.army.mil PWD

Chip D. Reid works on IFS-M Supply issues in the Systems Development and Maintenance Division of CPW's Facilities Management Directorate.

Will your computer systems function in the year 2000?

by Robert Fite

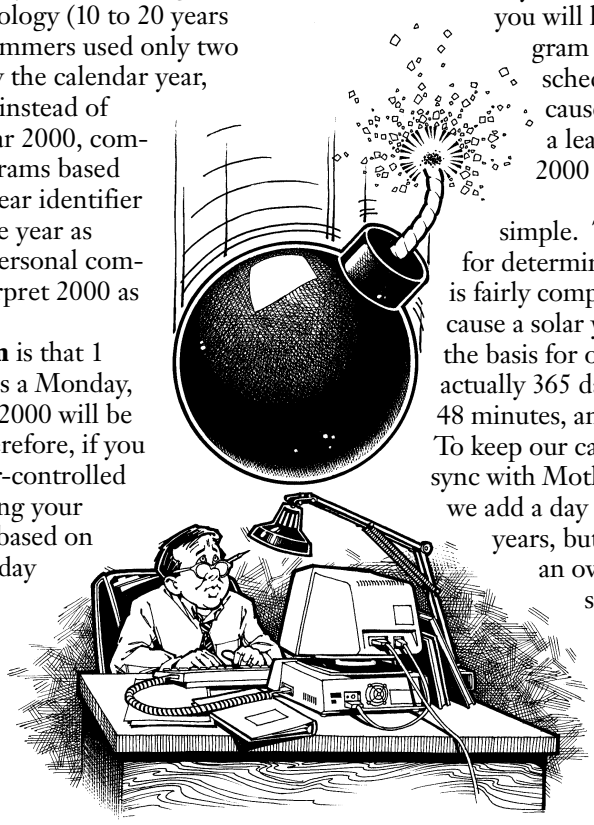
By now, I am sure that you have heard about the Year 2000 (Y2K) computer problem and what will happen on 1 January 2000 when all automated equipment will come to a screeching halt. The naysayers and others are predicting the end of the world as we know it at midnight on 31 December 1999.

Those predictions are intended to get your attention and convince you that you have to throw vast amounts of money at the problem, supposedly into the bank account of those making such predictions. Actually, there is a problem with older computer systems that must be dealt with now.

Are you aware that the Y2K problem could affect building control systems, such as elevators, electronic HVAC controls, Intrusion Detection Systems or other electronic security systems (ESS), and Utility Monitoring and control Systems (UMCS)? If so, I am sure you have already taken corrective action, and can enjoy the New Year's Eve party of the century. If not, please read on.

The basic issue is that to conserve expensive memory in the dark ages of computer technology (10 to 20 years ago), the programmers used only two digits to identify the calendar year, for instance, 97 instead of 1997. In the year 2000, computers and programs based on a two-digit year identifier will interpret the year as 1900, or some personal computers may interpret 2000 as 1980.

The **problem** is that 1 January 1990 was a Monday, while 1 January 2000 will be a Saturday. Therefore, if you have a computer-controlled system controlling your HVAC systems based on time of day and day of week, when you come to work on 6 January 2000, which will be a Thursday, your building will be cold because the computer thinks it is Saturday and has turned down the heat to conserve energy.



Furthermore, many modern elevator control systems have a micro-processor-based maintenance system which is programmed to take the elevator out of service if routine maintenance and inspections are not performed on time. On 1 January 2000, your elevator controls may believe that the last inspection was 100 years ago, and you can find all of the elevators temporarily out of service.

You may think that the problem is simple and that you can get around it by just reprogramming the computer to indicate that the normal work week is Saturday through Wednesday. This would work except that all your printed reports will have the wrong dates on them. However, by 29 February 2000, you will have to reprogram the work week schedule again, because 1900 was not a leap year and 2000 will be.

Life is not simple. The formula for determining leap years is fairly complicated because a solar year, which is the basis for our calendar, is actually 365 days, 5 hours, 48 minutes, and 46 seconds. To keep our calendars in sync with Mother Nature, we add a day every four years, but that results in an over correction, so we skip leap year in century years, but that over corrects also, so in century years that are devisable by 400, we have a leap year. For example, the years 1600 and 2000 will be leap years but the years 1700, 1800, and 1900 were not.

What can you do to ensure that you have a good time on New Year's Eve on 31 December 1999? The first step is to determine whether or not your system is ready for the year 2000. There is a high probability that it is not if it was procured prior to 1990.

If you do not know whether or not your systems have the Y2K problem, contact the manufacturer. Remember, any system based on a micro-processor which has a date function could be affected. There have been reports of even simple devices such as FAX machines that simply quit working when they are reprogrammed for the year 2000.

In some cases, you can determine if your equipment has a Y2K problem by changing the date to 2000 to see what happens. Be very careful doing this on a distributed system such as an ESS or UMCS, because you could cause a system-wide crash or irreversibly corrupt the database. If you have an ESS or UMCS, or some similar system, and cannot determine whether or not the system will be affected by the Y2K problem, please contact the IDS-MCX or UMCS-MCX at the Huntsville Engineer and Support Center at (205) 895-1741.

Once you identify the systems that will require some form of corrective action before 1 January 2000, you will have to decide on the best course of action. For some systems, that may mean total replacement, and it is already very late in the game to program funds and procure and install new hardware. So don't delay, check your systems now!

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Robert Fite works in the Directorate of Military Programs' Engineering Division, Technical Engineering Branch, HQUSACE.

Many find the Red Book a useful tool

Every year, CPW publishes a summary of what Army installations spend on real property during the previous fiscal year, including real property inventory costs for operations and maintenance.

The Directorates of Public Works, Annual Summary of Operations, is commonly known as the "Red Book." The Red Book provides a fiscal year-end overview of not only Army installation DPW operations, but also other DoD organizations that use, control or manage Army-owned real property.

The three-volume Red Book is the only printed source of recurring information that reports Army, Major Command, Installation and a number of DoD organization Real Property Maintenance Activities (RPMA) costs and the associated workload data.

The first two volumes of the Red Book are less detailed, and distribution is more liberal. Volume III and the more detailed installation information in the Executive Information System (EIS) database are more detailed, and as a result access is limited to official users.

For many organizations, the information in the Red Book is a useful tool for making budget decisions, making comparisons, looking for lessons learned and training future decision makers. Those who use the Red Book are many and varied. Some users might surprise you.

Organizations that use the information in the Red Book:

- **Installations** must know how much they spend in order to know how much they're going to spend, for contracting out services, doing them in-house, and so on.
- **The ACSIM** uses the Red Book to program the budget for operations and maintenance on Army installations. They divide the pie, and determine who gets what funding for family housing and Operations and Maintenance Army.
- **MACOMS** (as well as installations) use this data for comparisons — such as, how does what Fort Sill spends on custodial work compare to what Fort Jackson is spending? Often they will want to follow-up on their questions, and find out why there's a difference. MACOMs also want to compare themselves with other MACOMs, and they want to use this information to budget money to their installations.
- **Other key people at Headquarters, Department of the Army**, use this information, especially those who deal with comptroller, logistics, and environmental issues. These people generally go through ACSIM to get the information they need.
- **Department of Defense and the other service branches** use the Red Book. DoD uses the information for programming and budgets, with the DoD Comptroller generally working through the Army Comptroller. The other service branches are mostly interested in comparisons with the Army.
- **Congress** uses the information to decide how money will be appropriated. Congressional staffers use the information all the time.
- **The Base Realignment and Closure Commission** (BRAC) uses the information to make closure and realignment decisions.
- **Other federal agencies** use the information as an example of how to manage real property. The Department of Energy uses the information to generate a similar system and do comparative analysis. The Department of Commerce uses it to compile Gross National Product information, such as how many contracts are being awarded. The Department of Labor also uses contracting information from the Red Book. *(Note: The Army's real property management systems also satisfy the requirements of the Chief Financial officer Act of 1990.)*
- **Universities** use the information to compare the cost of operations and maintenance for real property. Service-connected universities like the War College use this information to teach future commanders what they will be responsible for.
- **Foreign governments** use this information as an example of how government-owned real property can be operated and maintained.
- **State governments** use the Red Book as an example of operations and maintenance of state-owned real property, like National Guard armories, or state-owned infrastructure such as roads and bridges.
- **Private sector** contractors and potential contractors use Red Book information, but the Army carefully controls release of this information to the private sector because of potential conflicts of interest. Contractors have a vested business interest in obtaining this information. And sometimes, the Army gives it to them, but only on a case-by-case basis. Those who are already doing business under contract with the government have access to this information, but only for the purpose of fulfilling the terms of their contract — not to formulate bids for a future contract, or to obtain any competitive advantage over other contractors or over the in-house workforce.

POC is Pete Sabo, CECPW-F, (703) 428-8209 DSN 328. PWD

Are you on the *Digest* distribution list?

If not, give Linda Holbert a call at (703) 428-7931 DSN 328.

Federal regs require repair of equipment that leaks ODCs

Recent regulations limit the rate at which Class I and II ozone depleting chemicals (ODCs) may leak from larger, federally-owned refrigeration and cooling equipment. One federal regulation, *40 Code of Federal Regulations (CFR) 82.156 (I)*, requires the repair, retrofit or replacement of any federally-owned refrigeration system whose maximum ODC charge exceeds 50 pounds and which leaks at a rate greater than the maximum allowable rates specified in *40 CFR 82.156 (i) (2)*. (***See Table 1***.)

Table 1

(Terms in this table are defined in *40 CFR 82.152*.)

System	Rate
Commercial Refrigeration	35%
Industrial Process Refrigeration	35%
Comfort Cooling	15%
All other refrigeration	15%

The purpose of this notice is to remind installations of the requirements of these regulations.

The Environmental Protection Agency issued the refrigeration system leak repair, retrofit, or replacement guidelines on September 8, 1995, in *60 FR 40419*. Affected Army facilities include:

- Larger industrial process coolers
- Commercial refrigerators
- Comfort coolers
- Other refrigerators.

The following formula is used to calculate the annual leakage rate whenever adding ODCs to the equipment: divide the number of pounds of ODC added to the system by the number of pounds in the system when full. Also multiply 365 days by one hundred and divide that by the number of days since last adding ODCs. Multiply the resulting two numbers. If the resulting leak rate exceeds the trigger levels listed in Table 1, report the leak to the EPA and repair the equipment.

Leak repair, retrofit, or replacement deadlines vary depending on the complexity of the repair. The EPA requires that the equipment be repaired within 30 days, unless the entire manufacturing process must be shut down, or it is impossible to repair the equipment in such a short period of time. The EPA allows 120 days when the entire manufacturing process must be shut down to repair the leak. If the system is too complicated to repair within 30 days, the installation must submit a repair, retrofit, or replacement plan describing how the installation will repair the leak.

After repairing the leak, the installation must leak-test the equipment before recharging it with ODCs. The installation must also conduct a leak verification test within 30 days of repairing the equipment.

For more information, please call the U.S. Army Environmental Center information line at 1-800-USA-3845, or order *EPA 300-B-95-010, October 1995* from the National Technical Information Service at (703) 487-4650.

PWD

Excerpted from an Army Environmental Center news release.

CENET members discuss reinvention

The Corps of Engineers National Energy Team (CENET) was established in the 1980s to support the Facilities portion of the Base Operations Research and Development (R&D) program in the mechanical/electrical area. Its members discuss ideas for innovative approaches to issues in design, construction, operation, and management of facilities, and the laboratories report their progress on current R&D work. Each meeting is normally established around a theme relevant to current Army facility or energy issues.

The FY 97 CENET meeting was held 29 April - 2 May 1997 in Indianapolis, Indiana. Titled "Reinvention of Installation Support," the meeting received input from both Corps of Engineer and installation activities and included work sessions to identify **barriers** and **solutions** to reinventing support to and sustainment of facilities on installations.

The speakers participating in this year's meeting were from the Corps' Reinvention Center (Fort Worth District), principal investigators from CERL and CRREL, a member of the Energy Plant Modernization Program project review team from Savannah District. Also on hand were the Chief of O&M and the Energy Manager from Fort Jackson, South Carolina, who provided an installation perspective on recently completed energy projects. The CENET members included personnel from HQUSACE, OACSIM, Corps of Engineer Districts, Divisions, Installations, Major Commands, and the laboratories.

Co-chaired by Headquarters USACE (CEMP-ET) and the Office of Assistant Chief of Staff for Installation Management (DAIM-FDF-U), the annual CENET meeting identifies and provides innovative ideas from different perspectives and helps to establish priorities for future R&D work.

POCs are Henry Gignilliat, DAIM-FDF-U, (703) 428-7003, and Joe McCarty, CEMP-ET, (202) 761-8619.

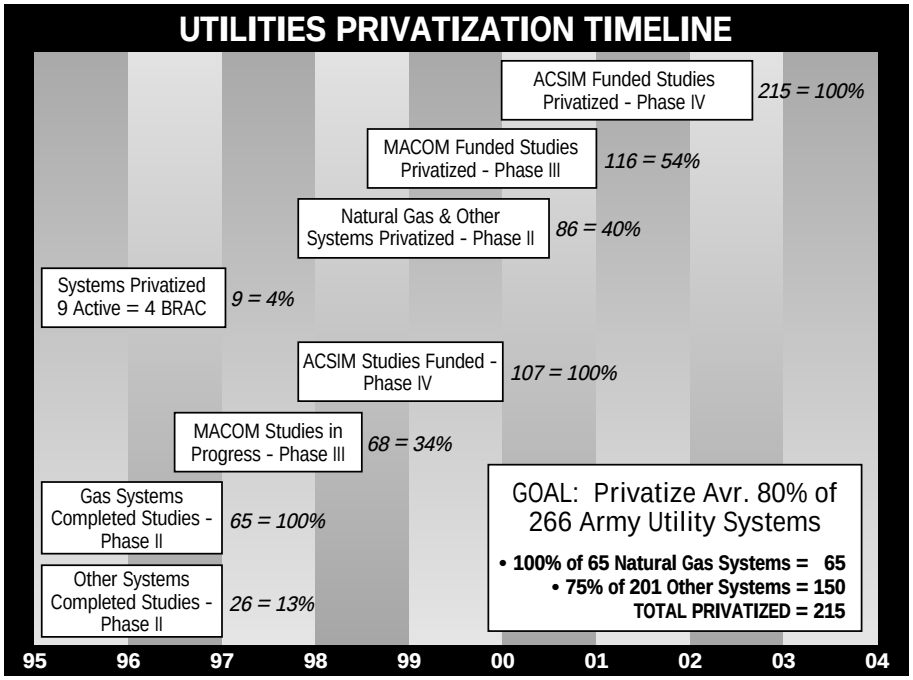
General Reimer boosts privatization effort

by William F. Eng

Putting the stature of his office behind the utilities privatization program, General Dennis J. Reimer, the Chief of Staff of the Army, gave good cause for turning over the Army's utilities to local public or privately-owned utility companies. Writing to his MACOM Commanders on 1 May 1997, General Reimer said that 21st Century Army installations "...will continue to require reliable, safe, efficient, and environmentally compliant utility services...", and, with few exceptions, our installations could obtain these services from local utility companies. According to the Chief, "...companies which provide utility services as their primary business can provide higher levels of service for electric, natural gas, water and wastewater..." than installations can now do on their own, and get the "best value" for the Army.

Privatizing Army utilities has been occurring for a number of years, but came into focus in the early 1990s at a few installations with utility infrastructures that were in really bad shape. They were in need of long-term solutions far different than the usual repair when broken.

One was a badly leaking natural gas distribution system. After a construction crew unknowingly damaged the line, complaints about the smell of leaking gas were dismissed as everyday occurrences. They exploded with deadly consequences to families living on the installation. Another was a propane gas system which could not be expanded to serve new units being relocated there. The installation was often close to running out of fuel whenever prolonged freezing winter weather kept rail or truck tankers from making deliveries. After privatization, both installations ended up with brand new natural gas systems owned and operated by the new utility provider.



Not until the establishment of the Office of the Assistant Chief of Staff for Installation Management did the Army develop a strategic plan for bringing the $15 billion worth of utility systems at the major Army installations into the 21st Century.

Privatizing utilities is the mainstay of the three-pronged strategy. General Reimer fully supports the Army's plan to privatize by the Year 2003, 100 percent of the natural gas systems and 75 percent of the remaining systems. Modernizing those utilities which will not be privatized, especially central heating systems, and increasing preventive maintenance to a level that reflects industrial standards are the other pieces of the strategy.

During the first years of the privatization programs, MACOMs and installations funded over 100 studies to determine if transferring them to a local public or private utility would be more economical, on a life-cycle cost basis, than keeping, upgrading and operating them ourselves. About half of these studies are finished and when the Chief of Staff's challenge to the Major Command is fully implemented, many installations will be moving rapidly to the next phases of the privatization process: solicitation of proposals, negotiation and transfer.

With the target year 2003 just six years away, the ACSIM is taking a number of initiatives to ensure that the privatization goals are reached:

- **Establishing an Army policy to facilitate the privatization of natural gas systems.** An installation with an old, obsolete system which the local gas distribution company is unlikely to take over and use, can consider the system as "having no value" for the purpose of privatization. Thus, there is no need to study or evaluate the system to determine a residual value to recoup during negotiations. Installations need to develop the technical requirements for issuing a request for proposals (RFP) for potential gas suppliers to install new gas mains and provide complete gas service. The offer which provides the best overall value, based on total cost and other qualitative factors, should be accepted.
- **Central funding of privatization studies**. ACSIM is funding studies of the remaining systems at active

CONUS installations in order to expedite their completion before FY 99. Utility systems at overseas installations are just starting to look at privatization.

- **Verification of "No possibility to Privatize."** Installations must double-check and certify whenever they determine that certain utilities "can not be privatized." MACOMs will be required to verify installation status and ACSIM must validate the status. By linking the military construction project review process to the utilities privatization program, the Army will ensure that every attempt to privatize has been taken before any Army funds will be programmed to upgrade or rehabilitate a utility system.
- **Legislative proposal to facilitate privatization.** At the request of the Army, Navy and Air Force, DoD submitted a legislative proposal to grant the Service Secretaries the authority to transfer utilities with underlying land. The latest version of the FY 98 DoD Authorization Bills contain this provision. ACSIM will monitor its progress through the remainder of the legislative process. Without this authority, each system being privatized needs specific legislation authorizing the transfer— a time-consuming process that keeps negotiated deals in limbo until a law is passed.
- **Additional legislation.** Another proposal, to waive federal taxation on the utility systems transferred as a "contribution-in-aid-construction," was submitted; however, it will not be considered until the FY 99 legislative session. When enacted, this will eliminate the tax consequences of transferring systems for less than fair market value.

The Army's utility privatization program is about retaining core competencies and divesting the Army of functions that can be obtained from public or privately-owned companies that can provide these services at higher levels of quality and give the best value to the Army. Visit the ACSIM home page for more information: http://www.hqda.army.mil/acsimweb/fd/fd1.htm

POC is William F. Eng, HQDA, ACSIM, (703) 428-7078 DSN 328. PWD

William F. Eng works on utilities privatization and reycling issues in the Facilities Policy Division of the ACSIM.

Army plans to modernize limited number of utilities

by Qaiser Toor

Private industry spends about 5 to 8 percent of PRV annually on maintenance and repair (M&R). The Army has only been able to fund 1 percent, and most of its infrastructure is in poor condition.

The Army's goal is to privatize 80 percent of all utility systems and 75 percent of all remaining systems by the Year 2003. Every effort will be made to privatize utility services at installations prior to modernizing of the utility.

But some utilities cannot be privatized. They must be modernized. Army strategy is to focus utilities modernization on the $1.2 billion worth of central heating plants and distribution systems that are least likely to be privatized. The modernization of heating and cooling systems has the added advantage that the capital expenditure pays for itself in as little as five years. Dollar savings result from more efficient equipment, reduced fuel requirements, eliminated steam and hot water leaks, and reduced manpower requirements.

The Army has programmed $60 million per year from FY 98 through FY 02 for central plant modernization in the Army budget for FY 98 to FY 03. A preliminary list of projects for central heating plant modernizations has been developed for 29 installations.

The list has been prioritized based on the two primary criteria. Installation Status Report (ISR) condition rating was the first criteria. ISR is a tool that installations use to rate their facilities condition. Installations that are in the worst condition as depicted in the ISR were highest on the priority list. Cost of operation, maintenance and repair on a unit cost basis (dollars per million BTU) was the second main criteria used to rank installations. Other factors such as MACOM priority, engineering analysis, and savings to investment ratio were also used to adjust the central heating plant modernization list.

A technical project evaluation team headed by the Office of the Assistant Chief of Staff for Installation Management (OACSIM), and which includes personnel from U.S. Army Center for Public Works (USACPW), U.S. Army Corps of Engineers (USACE) districts, and the U.S. Army Construction Engineering Research laboratory (USACERL) is visiting each installation that has a project for modernization. The team evaluates the project's validity and also provides assistance with analysis of the existing and proposed replacement systems, 1391 processor project development documents, or economic analysis. The team has already visited all seven of the installations in the FY 98 program.

A guidance package containing a project development brochure and manual for installations has also been developed. The manual will address design issues, provide various options and screening tool (steam or hot water, central plants or decentralized plants), provide lessons learned from various public and private sector projects, and from research and development efforts. USACE Districts can help installations design the projects or the installations can design the projects in-house.

Modernized heating systems will result in more reliable, efficient, state of the art equipment which will increase mission readiness, minimize pollutants, save operation, maintenance, and repair dollars, and increase quality of life for the soldiers, their families, and civilians who work and live on our installations.

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Qaiser Toor works on utilities and energy issues in the OACSIM's Facilities and Housing Directorate.

First Quarter FY 98 USACPW training schedule

by Mary Csontos

The U.S. Army Center for Public Works' Professional Development and Training Division provides systematic training management for approximately 150 Army installations worldwide. The Army's DPW (Facilities and Housing) Training Program is comprised of 25 basic courses executed about 80 times annually. Approximately 1,900 students from all MACOMs, CONUS and OCONUS are trained annually.

Listed below is the USACPW first quarter training schedule for those individuals interested in training. To register for a USACPW course, please FAX a copy of your completed DD Form 1556 to the registrar at (703) 428-7541 DSN 328 or mail a copy to U.S. Army Center for Public Works, ATTN: CECPW-FT (Registrar), 7701 Telegraph Road, Alexandria, VA 22315-3862.

For questions concerning course information such as course descriptions and prerequisites, please visit our Graybook on our homepage at: http://www.usacpw.belvoir.army.mil/pubs/Graybook/graybook.htm or contact the registrar at (703) 428-7593 DSN 328 or e-mail: cpw-ft.registrar@cpw01.usace.army.mil PWD

	DATE	COURSE	LOCATION
October	20-24 Oct 97	Army Housing Furnishing (170-001)	Metro DC Area
	20-23 Oct 97	Job Order Contracting Basic (450-701)	On-Site Avail
	27-31 Oct 97	Community Homefinding Relocation Referral Services (140-001)	Metro DC Area
November	03-06 Nov 97	Job Order Contracting Basic (450-001)	Metro DC Area
	17-21 Nov 97	DPW Functional (340-001)	Metro DC Area
	17-21 Nov 97	Army Housing Operations I (101-001)	Metro DC Area
	17-21 Nov 97	IFS-M Supply (509-001)	Alexandria, VA
	18-20 Nov 97	Job Order Contracting Advanced (451-001)	Metro DC Area
December	01-02 Dec 97	Basic SQL for IFS-M (502-001)	Alexandria, VA
	02-04 Dec 97	Job Order Contracting Advanced (451-701)O	N-Site Avail
	03-05 Dec 97	IFS-M Real Property (507-001)	Alexandria, VA
	08-09 Dec 97	IFS-M Customer Service (505-001)	Alexandria, VA
	08-12 Dec 97	Army Housing Facilities (150-001)	Metro DC Area
	09-11 Dec 97	Job Order Contracting Basic (450-702)	On-Site Avail
	10-12 Dec 97	IFS-M Contract Administration (504-001)	Alexandria, VA

New ACSIM to address DoD Recycling Workshop

MG David A. Whaley, the new Assistant Chief of Staff for Installation Management, will officially open the 8th annual DoD Combined Services Recycling Workshop on 20 September 1997 in Orlando, Florida. Held in conjunction with the National Recycling Coalition's Annual Congress, the DoD Recycling Workshop will discuss the latest issues of interest to installation recycling managers. For more information, please visit the ACSIM home page: http//www.hqda.army.mil.acsimweb/fd/recywksp.htm PWD

CPW assesses DPW training needs

by Johann Grieco

CPW's Professional Development and Training Division is assessing the training provided to installation personnel to determine if the current inventory of courses meets the needs of the DPW employees.

The specific level of training that is being evaluated in the current study is categorized as Level I, which includes the courses aimed at non-managerial and entry level DPW positions. The current Level I courses include 10 applications courses associated with IFS-M, such as IFS-M Customer Service and Job Cost Accounting. These courses are primarily focused on teaching students how to use the various IFS Modules.

However, CPW would like to determine if these courses should be expanded to include non-IFS-M information such as policy, regulations, and procedures related to that particular position and how the actions of that position impact other areas of the DPW. These courses will help explain why and how work must be accomplished in a specific way.

One aspect of the training needs assessment involved obtaining feedback from the field. We interviewed many DPW managers and their frontline staff, we asked Deputy DPWs who attended the recent CP-18 conference to complete a training needs survey, and requested all DPWs to complete a personnel information data call. Many of you also responded to a questionnaire on the CPW Home Page.

In addition to determining the Level 1 training needs, we are doing a study of the most effective training methodology for providing this training to DPW staff worldwide. Currently, most training that is offered is instructor-led at a single training site or regional one. As the Army reduces its operating budget, "distance learning" becomes a cost-effective alternative, especially to large student populations. Some people have received this form of training from paper-based correspondence courses, computer based software or video teleconferences. With more installations having access to the Internet, courses can be delivered in a multitude of formats.

POC is Johann Grieco, CECPW-FT, (703) 428-7589 DSN 328. PWD

Johann Grieco is a public works specialist in CPW's Professional Development and Training Division.

Air Force Institute of Technology (AFIT) training

by Tom Cook

The Civil Engineer and Services School (CESS) at AFIT accepts all applications on a "first-come, first-served" basis. There are no tuition costs for U.S. government employees attending CESS courses. Employees of organizations under contract to the Armed Services may attend on a "space available, tuition pay" basis.

MACOMs have been provided an application, a complete FY 98 schedule, course descriptions, and registration procedures. For course registration, please process a DD Form 1556 through the US Army Center for Public Works (CPW). Since this schedule was published late, the acceptance date for the October courses begins on 1 August 1997.

The Engineer Design and Environmental Management training courses offered by AFIT are conducted at Wright-Patterson Air Force Base, Ohio. Army employees who need more information on AFIT courses can contact POC Tom Cook at (703) 438-6036/DSN: 328; e-mail: tom.e.cook@cpw01.usace.army.mil; FAX: (703) 428-7541/DSN: 328. PWD

1st QUARTER FY 98 COURSE SCHEDULE

Course No./Title	Offering No.	Class Dates	Application Date Begins
ENG 555 -Airfield Pavement Construction Inspection	98A	17-21 Nov 97	1 Aug 97
ENV 020 -Environmental Compliance Assessment	98A	06-10 Oct 97	1 Aug 97
ENV 021 -Introduction to Installation Restoration Program	98A	20-24 Oct 97	1 Aug 97
ENV 022 -Pollution Prevention Program Operations & Management	98A 98B	20-24 Oct 97 15-19 Dec 97	1 Aug 97 1 Sep 97
ENV 025 -RACER	98A	03-04 Nov 97	1 Aug 97
ENV 220 -Unit Environmental Coordinator	98A	27-31 Oct 97	1 Aug 97
ENV 222 -Hazardous Material Pharmacy Management	98A	17-21 Nov 97	1 Aug 97
ENV 417 -Environmental Restoration Project Management	98A	27-31 Oct 97	1 Aug 97
ENV 418 -Environmental Contracting	98A	15-31 Oct 97	1 Aug 97
ENV 419 -Environmental Planning, Programming & Budgeting	98A	09-11 Dec 97	1 Sep 97
ENV 521 -Hazardous Waste Management	98A	03-07 Nov 97	1 Aug 97
ENV 531 -Air Quality Management	98A	01-05 Dec 97	1 Sep 97
Accumulation Site/Initial Point Management (4 hours)	98A 98B	10 Nov 97 12 Nov 97	1 Aug 97 1 Aug 97
HAZWOPER Refresher (8 hours)	98A 98B	13 Nov 97 4 Nov 97	1 Aug 97 1 Aug 97

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Army privatization efforts grow

Printed on recycled paper.